

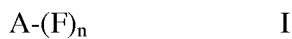
This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1. – 14. (Canceled)

Claim 15 (Currently Amended) An antibody-dye conjugate that accumulates in an edge area of cell tissue of a focus of a disease and thus makes the edge area of the focus of the disease optically detectable,

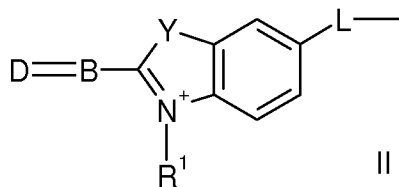
wherein the conjugate is a compound of formula I



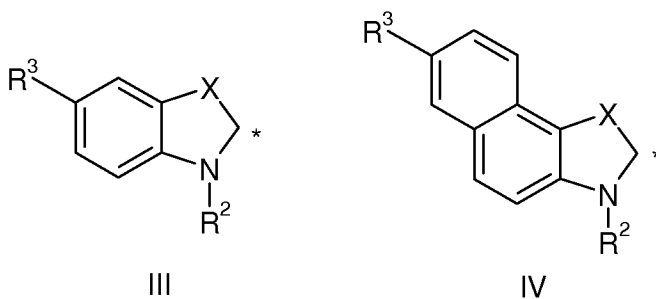
wherein

A is an antibody or an antibody fragment with high binding affinity to EDB-fibronectin,

F is a cyanine dye of formula II

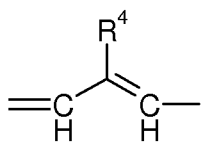


D is a radical III or IV

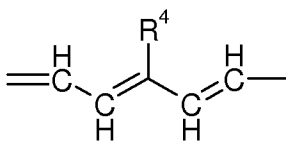


wherein the position labeled with * designates the interface site with radical B,

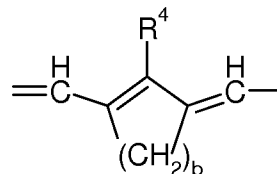
B is a group of formula V, VI, VII, VIII or IX



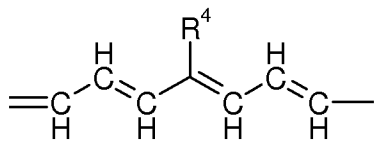
V



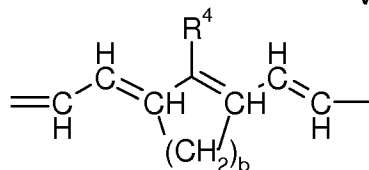
VI



VII



VIII



IX

R¹ and R² are, each independently, C₁-C₄ sulphonyl, a saturated or unsaturated, branched or linear C₁-C₅₀ alkyl chain, which is optionally substituted with up to 15 oxygen atoms, optionally substituted with up to 3 carbonyl groups, and optionally substituted with up to 5 hydroxy groups,

R³ is -COO¹E², -CON¹E², -NHCO¹E², -NHCON¹E², -NE¹E², -OE¹, -OSO₃E¹, -SO₃E¹, -SO₂N¹E² or -E¹,

E¹ and E² are, independently of one another, a hydrogen atom, C₁-C₄ sulphonyl, saturated or unsaturated, branched or straight-chain C₁-C₅₀ alkyl, which is optionally interrupted with up to 15 oxygen atoms, and optionally interrupted with up to 3 carbonyl groups, and is optionally substituted with up to 5 hydroxy groups,

R⁴ is a hydrogen atom or a fluorine, chlorine, bromine or iodine atom,

b is 2 or 3,

X is oxygen, sulphur, =C(CH₃)₂ or -(CH=CH)-,

Y is $=C(CH_3)_2$,

L is a direct bond or a linker which is a straight-chain or branched carbon chain with up to 20 carbon atoms, which is optionally substituted with one or more -OH, -COOH, or SO_3 groups and optionally interrupted, in one or more places, by an -O-, -S-, -CO-, -CS-, -CONH-, -NHCO-, -NHCSNH-, $-SO_2$ -, PO_4 - or an -NH-group or an aryl ring,

and

n is 1 to 5,

and wherein said conjugate accumulates in an edge area of cell tissue of a focus of a disease and thus makes the edge area of the focus of the disease optically detectable.

Claim 16 (Previously Presented) An antibody-dye conjugate according to Claim 15, wherein the antibody is L19 or E1.

Claim 17 (Previously Presented) An antibody-dye conjugate according to Claim 15, wherein the dye in the visible spectral range of light induces an optical signal.

Claim 18 (Previously Presented) An antibody-dye conjugate according to Claim 16, wherein the dye in the visible spectral range of light induces an optical signal.

Claim 19 (Previously Presented) An antibody-dye conjugate according to Claim 15, wherein the dye induces a fluorescence signal only with use of a defined wavelength range of visible or near-infrared light.

Claim 20 (Previously Presented) An antibody-dye conjugate according to Claim 16, wherein the dye induces a fluorescence signal only with use of a defined wavelength range of visible or near-infrared light.

Claim 21 (Previously Presented) A pharmaceutical composition comprising one or more antibody-dye conjugates according to Claim 15 and a pharmaceutically acceptable solvent, buffer or vehicle.

Claim 22 (Previously Presented) A pharmaceutical composition comprising one or more antibody-dye conjugates according to Claim 16 and a pharmaceutically acceptable solvent, buffer or vehicle.

Claim 23 (Previously Presented) A method for intraoperative visualization of edge areas of a focus of a disease comprising administering an antibody-dye conjugate according to Claim 15 and visualizing the edge areas of a focus of a disease during an operation on a patient.

Claim 24 (Previously Presented) A method according to Claim 23, wherein the visualization is microscopic and macroscopic.

Claim 25 (Previously Presented) A method according to Claim 23, wherein the disease is an angiogenesis-dependent disease, malignant tumor or metastases thereof, benign tumor, precancerous tissue changes, endometriosis, hemangiomas or an ectopic pregnancy.

Claim 26 (Previously Presented) A method for visualization of edge areas of a focus of a disease during surgery comprising administering an antibody-dye conjugate according to Claim

15 and visualizing the edge areas of a focus of a disease during surgery on a patient, wherein the disease is an angiogenesis-dependent disease, malignant tumor or metastases thereof, benign tumor, precancerous tissue changes, endometriosis, hemangiomas or an ectopic pregnancy.

Claim 27 (Previously Presented) A method for intraoperative visualization of foci of a disease comprising administering an antibody-dye conjugate according to Claim 16 and visualizing edge areas of a focus of a disease.

Claim 28 (Previously Presented) A method for intraoperative visualization of edge areas of a focus of a disease comprising administering an antibody-dye conjugate according to Claim 16 and visualizing edge areas of a focus of a disease.

Claim 29 (Previously Presented) A method according to Claim 28, wherein the visualization is microscopic and macroscopic.

Claim 30 (Previously Presented) A method according to Claim 27, wherein the disease is an angiogenesis-dependent disease, malignant tumor, or metastases thereof, benign tumor, precancerous tissue changes, endometriosis, hemangiomas or an ectopic pregnancy.

Claim 31 (Previously Presented) A method for visualization of edge areas of a focus of a disease during surgery comprising administering an antibody-dye conjugate according to Claim 16 and visualizing the edge areas of a focus of a disease during, wherein the disease is an angiogenesis-dependent disease, malignant tumor or metastases thereof, benign tumor, precancerous tissue changes, endometriosis, hemangiomas or an ectopic pregnancy.

Claim 32 (Previously Presented) A method for intraoperative visualization of edge areas of a focus of a disease comprising administering an antibody-dye conjugate according to Claim 18 and visualizing edge areas of a focus of a disease.

Claim 33 (Previously Presented) A method for intraoperative visualization of edge areas of a focus of a disease comprising administering an antibody-dye conjugate according to Claim 20 and visualizing edge areas of a focus of a disease.

Claim 34 (Previously Presented) An antibody-dye conjugate according to Claim 15, wherein the dye is bis-1,1'-(4-sulfobutyl)indocarbocyanine.

Claim 35 (Previously Presented) An antibody-dye conjugate according to Claim 15, wherein the dye is bis-1,1'-(4-sulfobutyl)indocarbocyanine and the antibody is L19.

Claim 36 (New) An antibody-dye conjugate of Claim 15 wherein D is III and B is VIII.

Claim 37 (New) An antibody-dye conjugate of Claim 36 wherein
R³ is H or SO₃H, X is =C(CH₃)₂;
R¹ and R² are C₁-C₄-sulphoalkyl and R⁴ is H.